On the Visualization of the Function

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Lecture Proposal for the ACDCA strand

ABSTRACT

We present the introduction of the notions of function, at the beginning of the fourth grade of Grammar school by using program package *GeoGebra*.

The emphasis of the work is on testing three different classes in fourth grade of secondary school. The questionnaire, considered in paper of David Tall, is given to our students and the obtain results are analyzed.

In order to check if students had a previous similar knowledge, the first step was to investigate the student's knowledge of definition and notions of function at the end of Novi Sad Grammar school.

Two of the three groups were considered as experimental groups. In these two experimental groups, the topic was taught by using program package *GeoGebra*. The third group was considered as a control group and this concept was introduced without using the computer.

After analyzing the obtained results, we will describe the different outcomes that have been achieved concerning students level of knowledge. We will show that students from experimental groups, who used program package *GeoGebra*, afforded better achievements in visualization of Function than the students from the control group.

Keywords

CAS, visualization, teaching-learning process, calculus, computers, limit process, functions.